UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

KARL STORZ ENDOSCOPY-AMERICA, INC.,

Plaintiff,

v.

STRYKER CORPORATION, et al.,

Defendants.

Case No. 14-cv-00876-RS

ORDER CONSTRUING CLAIMS

I. INTRODUCTION

Plaintiff and patent owner Karl Storz Endoscopy-America, Inc. ("KSEA") and defendants Stryker Corporation and Stryker Communications, Inc. ("Stryker") compete to provide an array of medical products, including endoscopes and integrated operating room systems. Fresh off a cross-country trip to the United States Patent Trial and Appeal Board ("PTAB"), they now seek construction of nine terms pursuant to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc). For the reasons set forth below, the disputed terms are construed as follows.

II. BACKGROUND

KSEA manufactures endoscopes, devices, and camera systems for medical and industrial applications. Stryker likewise manufactures an array of medical and surgical products, including endoscopes. On February 26, 2014, KSEA sued Stryker alleging infringement of four patents related to endoscopic devices and integrated operating room systems. Stryker denied the allegations and asserted counterclaims for noninfringement and invalidity. Stryker also averred KSEA's claims were barred by a settlement agreement entered into to resolve previous litigation. *See Karl Storz Endoscopy-Am., Inc. v. Stryker, Inc. et al.*, 09-cv-00355-WHA ("*Karl Storz I*").

Over the ensuing months, KSEA added allegations that Stryker's products infringe a fifth

patent. KSEA then moved to dismiss Stryker's counterclaims and to strike affirmative defenses arising out of alleged breaches of the *Karl Storz I* settlement agreement. KSEA's motion to dismiss was granted on October 3, 2014. KSEA subsequently served supplemental infringement contentions and Stryker served its invalidity contentions.

The parties filed their respective opening claim construction briefs on February 13, 2015. Less than a week later, Stryker filed petitions for inter partes reexamination ("IPR") of each of the five patents at issue in this litigation. Contemporaneous with its IPR petitions, Stryker moved to stay these proceedings. The stay was granted on March 30, 2015.

The PTAB (1) denied Stryker's IPR petitions for U.S. Patent Nos. 7,471,310 ("'310 patent"); 7,821,530 ("'530 patent"); 7,844,657 ("'657 patent"); and 8,439,821 ("'821 patent"), (2) granted Stryker's IPR petitions for U.S. Patent No. 8,069,420 ("'420 patent") on 42 of the 44 challenged claims, and (3) denied Stryker's IPR petitions for the '420 patent on 2 of the 44 challenged claims. KSEA disclaimed the 42 claims for which IPR had been instituted, and the PTAB granted KSEA's request for adverse judgment and terminated the IPR proceedings. The stay was lifted on January 5, 2016. The parties have re-briefed the claim terms at issue in this proceeding.

III. LEGAL STANDARD

Claim construction is a question of law to be determined by the Court. *Markman*, 52 F.3d at 979. "Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (quoting *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)). Accordingly, a claim should be construed in a manner that "most naturally aligns with the patent's description of the invention." *Id.*

The first step in claim construction is to look to the language of the claims themselves. "It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips*, 415 F.3d at 1312 (quoting *Innova/Pure Water*,

Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004)). A disputed claim term should be construed in a manner consistent with its "ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Phillips*, 415 F.3d at 1312–13. The ordinary and customary meaning of a claim term may be determined solely by viewing the term within the context of the claim's overall language. *See id.* at 1314 ("[T]he use of a term within the claim provides a firm basis for construing the term."). Additionally, the use of the term in other claims may provide guidance regarding its proper construction. *Id.* ("Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term.").

A claim should also be construed in a manner that is consistent with the patent's specification. *See Markman*, 52 F.3d at 979 ("Claims must be read in view of the specification, of which they are a part."). Typically the specification is the best guide for construing the claims. *See Phillips*, 415 F.3d at 1315 ("The specification is . . . the primary basis for construing the claims."); *see also Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term."). In limited circumstances, the specification may be used to narrow the meaning of a claim term that otherwise would appear to be susceptible to a broader reading. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001); *Phillips*, 415 F.3d at 1316. Precedent forbids, however, a construction of claim terms that imposes limitations not found in the claims or supported by an unambiguous restriction in the specification or prosecution history. *Laitram Corp. v. NEC Corp.*, 163 F.3d 1342, 1347 (Fed. Cir. 1998) ("[A] court may not import limitations from the written description into the claims."); *Comark Commc'ns., Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998) ("[W]hile . . . claims are to be interpreted in light of the specification, it does not follow that limitations from the specification may be read into the claims."); *SRI Int'l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en

banc) ("It is the *claims* that measure the invention.") (emphasis in original). A final source of intrinsic evidence is the prosecution record and any statements made by the patentee to the United States Patent and Trademark Office ("PTO") regarding the scope of the invention. *See Markman*, 52 F.3d at 980.

Courts may also consider extrinsic evidence, such as expert testimony, dictionaries, or technical treatises, especially if such sources are "helpful in determining 'the true meaning of language used in the patent claims.'" *Phillips*, 415 F.3d at 1318 (quoting *Markman*, 52 F.3d at 980). Ultimately, while extrinsic evidence may aid the claim construction analysis, it cannot be used to contradict the plain and ordinary meaning of a claim term as defined within the intrinsic record. *Phillips*, 415 F.3d at 1322–23.

IV. DISCUSSION

A. The '310 & '530 Patents (Camera Patents)

The '310 and '530 patents are entitled "Intelligent Camera Head." The patents are related and share a common specification.[1]

By way of background, video cameras can be separated into two basic categories based upon their physical configurations. First, there are "all-in-one units," such as camcorders, where the portion that captures video images is combined in the same housing with the portion that controls operation and processes the images to create video. Second, there are video cameras in which physically separate, individual units achieve these respective functions. In these "separated" systems, the capturing portion is called a "camera head," while the control and processing portion is called a "camera control unit" ("CCU"). The camera head and CCU typically are connected to each other through a cable. The '310 and '530 patents fall into the "separated" category. That is, each contains claims that recite three components: a camera head, a CCU, and a cable connecting the two.

The inventions relate to the interchangeability of camera heads with CCUs. Specifically,

[1] The '530 patent is a continuation of the '310 patent.

in previous systems, timing signals (which synchronize electronic components) were generated in the CCU and transmitted to the camera head, but this limited which camera heads could be connected to each particular CCU because the technical features had to match. The camera patents improve interchangeability by generating timing signals in the camera head and transmitting them to the CCU—as opposed to the other way around. They also improve interchangeability by employing a memory device within the camera head to store information. The disputed claim terms relate to these various features.

1. "video imaging system"

Stryker maintains this term is non-limiting and does not require construction. KSEA agreed at oral argument and subsequently withdrew its proposed construction. The term "video imaging system" accordingly will not be further construed.

2. "camera head"

The term "camera head" appears in virtually all claims of the '310 and '530 patents.[2] KSEA would construe it as an "endoscopic video camera, i.e., a video camera that includes or is adapted to be connected to an endoscope," whereas Stryker proposes "a device that generates an uninterrupted sequence of data that represents moving visual images."

The term "camera head" shall be construed to mean "endoscopic video camera, i.e., a video camera that includes or is adapted to be connected to an endoscope." Stryker's principal argument is that "camera head" is not expressly defined. The specification may not contain a textbook example of what it looks like to define a term, but it is still highly persuasive where it states "Endoscopic video cameras (hereinafter referred to as 'camera heads') are most advantageously small and lightweight . . . ." Dkt. No. 176, Ex. 1 at 1:18–20. It goes on to use "camera head" in a manner that supports this definition, *see, e.g., id.* at 1:40–41 ("Similar to the camera head itself, it is advantageous that cables be small in diameter and lightweight."), which

[2] The claims asserted in the '310 patent include 1-5, 15-16, 19, 21-22, and 25. The claims asserted in the '530 patent include 1-2 and 4-6.

makes sense given the background states "the present invention generally relates" to "the field of video endoscopy," *id.* at 1:11–12.

The PTAB reached the identical conclusion and, though Stryker submits it erred, the opinion does not evince the defects Stryker articulates. The PTAB said it reached its construction "in light of the specification," and from that statement, Stryker draws the negative inference the PTAB did not consider the prosecution history. *See Stryker Corp. v. Karl Storz Endoscopy-Am., Inc.*, IPR2015-00672, Paper 9, 2015 WL 5190755, at *6 (P.T.A.B. Sept. 1, 2015). That the PTAB said little about the prosecution history does not mean it refused wholly to consider it. More to the point, the PTAB emphasized the specification because it found the background section defined "camera head" explicitly. *Id.* Nor is it clear, as Stryker asserts, the PTAB applied an incorrect legal standard, as the authority Stryker submits states "claims should always be read in light of the specification." *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1298 (Fed. Cir. 2015).

In any event, turning with fresh eyes to the prosecution history here, it appears the patentee argued in part prior art references were not directed toward use with endoscopes or in medical procedures. *See, e.g.*, Dkt. No. 176, Ex. 9.4 at 5 ("Ikeda et al. is not directed toward use with an endoscope."); *Id.* at 12, 13 (noting Koide is unsuitable during "a medical procedure" as "a doctor" needs a continuous video stream). While prior art may eventually have been overcome using different arguments, KSEA need not respond with this particular contention to rebuff every advance of the examiner, as Stryker contends.

Lastly, while five of the embodiments illustrate "a video imaging system," and two illustrate "an endoscopic system," the first five include a camera head, which the specification defines reasonably and with deliberate choice to be endoscopic. *See Abbott Labs. v. Syntron Bioresearch, Inc.*, 334 F.3d 1343, 1354 (Fed. Cir. 2003) (noting lexicography must appear "with reasonable clarity, deliberateness, and precision"). All told, the record supports KSEA's contention the term "camera head" should be construed to mean "endoscopic video camera, i.e., a video camera that includes or is adapted to be connected to an endoscope."

3. "a memory device, accessible by said processor, containing camera head information"

The term "a memory device, accessible by said processor, containing camera head information" appears in the independent claims of the '310 patent (1, 9, 15, and 21), and claim 1 of the '530 patent. The memory device itself is a component contained within the camera head that stores information that is accessed subsequently by the CCU. The memory device helps achieve interchangeability of camera heads with CCUs by permitting this information storage and retrieval process to take place.

The crux of the dispute concerns the meaning of "camera head information." The specification provides some guidance on the topic. It explains "[s]oftware executing on the programmable CCU verifies connection to the camera head and retrieves *camera head information* relating specifically to that camera head. Camera head information may include command and control data comprising: software programs, operating information, timing signal data, camera head identification information, camera use information and the like." Dkt. No. 176, Ex. 1 at 3:62–4:1 (emphasis added).

Stryker's construction adds limitations that speak to the function of the memory device. It proposes: "a device that stores information specific to a type of camera head where the information is (1) common among other camera heads of the same type but different from camera heads of a different type, (2) accessible by said processor, and (3) retrieved by the camera control unit after software executing on the camera control unit verifies connection to the camera head."[3]

KSEA's position is the phrase does not require construction. If it must be construed, KSEA proposes substitutions drawn from the specification. KSEA would read "memory device" as a "a device that stores data," and "camera head information" as "information relating to the camera head, such as software programs, operating information, timing signal data, camera head identification information, camera use information or the like, but excluding video data."

[3] Stryker indicated at oral argument it was comfortable dropping part three of its construction.

The term "a memory device, accessible by said processor, containing camera head information" shall be construed as "a device that stores data and that is accessible by said processor, containing information relating to the camera head." Stryker's construction is unjustifiably narrow, and could exclude appropriate information. That is, while some camera head information may be "specific to a type of camera head," as the specification explains, other information that still meets the definition may not be specific to a type of camera head. *See* Juergens Decl. ¶ 19 (naming "serial number[s]," "camera use information," and "bad pixel data"). The illustrative list KSEA would append, however, generates its own unwarranted complexity, and adding those words runs the risk of implying bounds that should not be imported from the specification. *See Laitram*, 163 F.3d at 1347. The elected construction adequately captures the customary meaning the term would have to a person of ordinary skill in the art.

4. "a timing generator, generating a timing signal particular to said camera head, the timing signal actuating said imager and sent to said camera control unit"

The phrase "a timing generator, generating a timing signal particular to said camera head, the timing signal actuating said imager and sent to said camera control unit," appears in claims 1-14 of the '310 patent and claim 3 of the '530 patent. KSEA insists the claim does not require construction, whereas Stryker's proposal adds clarifications drawn from the component's function.

A timing signal is a signal used to synchronize electronic components. In previous systems, timing signals were generated in the CCU and transmitted to the camera head, but this limited which camera heads could be connected to each particular CCU because the technical features had to match. Once again, the camera patents allegedly fix this interchangeability problem, at least in part, by generating timing signals in the camera head and transmitting them to the CCU—as opposed to the other way around.

Stryker's construction hones in on this innovation by adding certain clarifying limitations, including that the timing signal be "unique to the type of camera head," "not [be] derived from a source external to the camera head," and "differ from the timing signal requirements of other types

of camera heads that may be connected to a common CCU."[4] If construed, KSEA proposes " a device that generates one or more timing signals in said camera head, one or more signals generated by the timing generator is utilized by the imager to develop video data and the signal is sent to the camera control unit."

The disputed phrase shall be construed to mean "a device in the camera head that generates a periodic signal used to synchronize electronic components, where the signal (a) is unique to the type of camera head, (b) is not derived from a source external to the camera head, (c) actuates the imager in the camera head, and (d) is sent from the camera head to the camera control unit." KSEA's proposal ignores the claim language "particular to said camera head," which supports the first component of Stryker's proposed construction. As Stryker points out, the specification also distinguishes between different "types of camera heads" based on "each having differing timing signal requirements." Dkt. No. 176, Ex. 1 at 1:48–49. Next, though KSEA submits the timing signal can be derived from a source external to the "video imaging system," the specification and prosecution history support that the signal is not derived externally from the camera head. The patent describes as a disadvantage of prior art that timing signals were generated in the CCU. *See id.* at 1:50–59 (noting this feature detracts from interchangeability). The applicant also told the European Patent Office "[t]he provision of timing signals from the camera head is what allows many different types of camera heads to be attached to and controlled by the camera control unit." Dkt. No. 176, Ex. 12 at KS038395. Likewise, the applicant told the PTO that Yokoyama, a prior art reference, failed to teach the timing signal being "particular to said camera head" because the timing signal was derived from an external source. *Id.* Ex. 9 at KS043925. The final two components of the proffered construction are drawn directly from the claim language. Part three

[4] Parts four and five of Stryker's construction reiterate the claim language. Stryker proposes in full "a device in the camera head that generates a periodic signal used to synchronize electronic components, where the signal (1) is unique to the type of camera head, (2) is not derived from a source external to the camera head, (3) differs from the timing signal requirements of other types of camera heads that may be connected to a common camera control unit, (4) actuates the imager in the camera head, and (5) is sent from the camera head to the camera control unit."

of Stryker's construction appears redundant of part one, and therefore is unnecessary.

B. The '657 Patent (Central Control Patent)

The '657 and '821 patents concern systems and methods for the central control of medical devices in a surgical operating theater. By way of background, operating rooms typically contain both safety-related equipment (endoscopes, monitors, insufflators, pumps) and non-safety related equipment (air conditioning, telephones, picture archiving systems). The claims of these patents discuss different configurations for controlling these devices.

In the '657 patent, the claimed configurations involve two "networks": (1) a surgical network, and (2) an ancillary network. The two networks communicate through a translator. An operator is able to control devices on the ancillary network through an input device connected to the surgical network. In doing so, the input device sends a "medical command" (for example, a command from the surgeon for the camera to "zoom in") to a controller. The controller, in turn, generates medical command data, which it sends to a translator. The translator takes that medical command data, translates it, and sends it to a medical device, which is connected to the ancillary network. The device receives the medical command, carries it out, and generates feedback data, which it sends back to the translator.

5. "an input device, connected to said surgical network, which inputs a medical command"

The term "an input device, connected to said surgical network, which inputs a medical command" appears in the independent system claims of the '657 patent. As detailed in the abstract, the input device is "for *entering* a medical command." Dkt. No. 118, Ex. H. Thus, KSEA insists this term has its customary meaning and does not require construction. It submits in the alternative the term should be given the full measure of its ordinary meaning, and offers a number of proposed constructions to help achieve that effect.

First, KSEA construes "input device" as "a device for sending medical commands to a medical device." KSEA draws this construction from a putative definition appearing in the specification. Dkt. No. 118, Ex. H at 6:22–24 ("The input device can be any device by which an

operator can send commands to the devices of [the surgical and ancillary networks].”). Next, KSEA argues “connected” means “in electronic communication” because medical commands are communicated physically (e.g., Ethernet) and wirelessly (e.g. Bluetooth), both of which are electrical connections. Lastly, KSEA construes “medical command” as “an instruction for a medical device to perform a function.”[5]

Stryker, by contrast, construes a “medical command” as “an instruction for a medical device to take a *particular* action.” Stryker then adds the input device “introduces that instruction to the surgical network,” and “outputs” the medical command downstream to the ancillary device. Thus, by reading the claim language, Stryker concludes the input device is “a device within the surgical network that outputs an instruction for a medical device to take a particular action and introduces that instruction to the surgical network.”

The term “an input device, connected to said surgical network, which inputs a medical command” shall mean “a device for sending medical commands to a medical device, in electronic communication to said surgical network, which introduces an instruction for a medical device to perform an action.” The first portion of this construction is drawn sensibly from the patent specification, Dkt. No. 118, Ex. H at 6:22–26, which also supports that “connected to” should be understood as “in electronic communication,” *id.* at 6:28–30, 5:50–53, 5:63–67. Stryker’s proposal to import the word “within” leverages one of KSEA’s constructions, but it is not supported by the plain language of the claim, *id.* at 8:32, or by the specification, *id.* at 6:20–37 (indicating the input device can be remotely connected, permitting control “via a Local Area Network” or “from a distant location via the Internet”). *See also* Dkt. No. 176, Ex. 15.1 at 47:18–48:8 (indicating a device connected to a network does not necessarily fall “within” that network). Stryker next offers two dictionary definitions to vouch for the word “particular,” but neither

[5] KSEA indicated at oral argument it supported the words “an action” in place of “a function.” Its full proposal reads “a device for sending medical commands to a medical device, in electronic communication to said surgical network, which inputs an instruction for a medical device to perform a function.”

definition lends Stryker the support it seeks to invoke. Hargrave's Communications Dictionary defines "command" generically as "an instruction for *an* action to take place." Hargrave's Communcations Dictionary 110 (2001) (emphasis added). Likewise, the Microsoft Computer Dictionary defines "command" as "[a]n instruction to a computer that, when issued by the user, causes *an* action to be carried out." Microsoft Computer Dictionary 96 (4th ed. 1999) (emphasis added). Moving on, the claims indicate a medical command is an instruction for a device to perform an action. *Id.* at 8:40–43 (stating medical commands are received and "carrie[d] out" by devices). Lastly, KSEA is correct the word "input" deserves its ordinary meaning, but it is ambiguous as it appears in the claim. The word "introduces," advanced by Stryker, clarifies the function of the device, and does so in a manner consistent with the ordinary meaning of the term "input."

6. "feedback data generated by said at least one ancillary medical device and communicated to said translator via said ancillary network"

The term "feedback data generated by said at least one ancillary medical device and communicated to said translator via said ancillary network" appears in claim 21. The parties' constructions both contain the clause "which is sent to the translator via the ancillary network." Accordingly, the only component requiring construction is the term "feedback data." On that front, both parties state it is "data generated by the at least one ancillary medical device," but whereas KSEA says "in response to a medical command," Stryker says "in response to *carrying out* the medical command *inputted by the input device*."

The disputed term shall be construed to mean "data generated by the at least one ancillary medical device in response to carrying out the medical command, which is sent to the translator via the ancillary network." KSEA submits the claims state clearly feedback data responds to the medical command—i.e., the instructions—but not necessarily to *carrying out* that command. That is not so. Claim 21 recites the input device "inputs a medical command" and the ancillary medical device "*carries out* the . . . medical command." Dkt. No. 118, Ex. H at 9:32, 9:42 (emphasis added). It then recites "feedback data generated by said at least one ancillary medical device and

communicated to said translator via said ancillary network." *Id.* at 9:44–46. Claim 61—a method claim—suggests the same. It recites "entering a medical command into the surgical network," *id.* at 12:16, then "executing the corresponding medical command with the ancillary medical device," *id.* at 12:24–25, then immediately recites "generating feedback data with the ancillary medical device," *id.* at 12:26–27. Perhaps most compelling, the specification states "[t]he surgical controller communicates [the medical command data] to medical device, which executes the command. The medical device *then* generates feedback data, which it communicates back to the surgical controller." *Id.* at 7:57–60 (emphasis added). Use of the word "then," as Stryker points out, indicates the medical device generates feedback data in response to executing (i.e., carrying out) the medical command.

Stryker objects to KSEA's construction because it reads "in response to *a* medical command," which fails to recognize an antecedent basis for "*the* medical command." The parties agreed to use of the word "the" instead of "a" at oral argument. Lastly, Stryker's proposed addition of "inputted by the input device" adds needless redundancy and is therefore unwarranted. When reading claim 21 from start to finish there isn't confusion as to the origination of the medical command.

C. The '821 Patent (Central Control Patent)

The configurations claimed in the '821 patent focus on controlling safety and non-safety related devices using two separate *controllers*. In particular, the first controller can control only safety-related devices, such as endoscopes or monitors. The second controller can control only non-safety related devices, like air conditioning. The purpose of separating control is to prevent problems with the non-safety related devices from interrupting or interfering with the control of safety-related devices.

7. "controller"

The term "controller" appears in claims 1-3 and 8-11 of the '821 patent. KSEA proposes it be construed as a "unit, including a processor or computer, directly controlling functions of at least one device." Stryker counters the term should be construed as "a device for controlling the

operation of other devices."

"Controller" shall be construed as "a device for controlling the operation of other devices." Claim 1 recites "a first controller" and "at least one medical device having safety-related functions *controlled by said first controller*." Dkt. No. 176, Ex. 4 at 7:7–9 (emphasis added). It further recites "a second controller" and "at least one device having non-safety related functions *controlled by said second controller*." *Id.* at 7:10–13 (emphasis added). The claim language thus establishes a "controller" is "a device for controlling the operation of other devices." What is more, the abstract states the invention "relates to a system for the central *control of devices*," as does the field of the invention and the stated object of the invention. *See id.* at 1:18–20, 2:1–3 (emphasis added).

The parties' disagreement appears to stem from the phrase "at least one medical device having safety-related functions *controlled* by said first controller." *Id.* at 7:12–13 (emphasis added). While KSEA thinks "controlled" modifies the word "functions," "controlled" actually modifies the word "device." As such, the claims do not indicate, as KSEA suggests, the controller controls only the "functions" of devices. Rather, the claims indicate the controller controls "devices" which either have safety- or non-safety related functions.

KSEA also submits the specification refers to a controller as a "control unit" or "computer unit," *see id.* at 4:25, 5:22, meaning the controller can be understood as a "unit, including a processor or computer." As Stryker points out, however, neither "computer" nor "processor" appears in the claim language, and they seem to describe only possible embodiments in the specification. Their mere mention does not require their appearance in the construction, and the specification otherwise supports Stryker's proposal.

Stryker insists—correctly—there is no support for limiting "controller" to "directly" controlling functions of devices. Direct control implies the existence of "indirect control," yet neither concept appears in the patent. Finally, though KSEA submits "operation" invokes a medical procedure, its use in this construction is not confusing, as it comports with basic common sense in the context of the patent.

8. "can only control devices that do not have safety-related functions"

The term "can only control devices that do not have safety-related functions" refers to the role of the second controller in the invention. The term appears in independent claims 1 and 10.

Helpfully, the specification defines "safety-related systems" expressly: "In this case it is assumed that the mentioned medical devices may be divided into two different groups, namely safety-related systems on one hand, as for example endoscopic devices (insufflators, pumps, or RF-surgery and so on), op-table-control etc., namely devices or systems which may be life-threatening for a patient in the event of a breakdown or failure, and non-safety-related systems on the other hand, like picture archiving, material management systems, telephone remote control etc." Dkt. No. 176, Ex. 4 at 1:54–62.

In light of that definition, the PTAB construed the phrase "can only control devices that do not have safety-related functions" to mean "wherein said second controller can only control devices whose breakdown or failure during a medical procedure are not life-threatening for a patient." *Stryker Corp. v. Karl Storz Endoscopy-Am., Inc.*, IPR2015-00679, Paper 9, 2015 WL 5190758, at *4 (P.T.A.B. Sept. 1, 2015). Stryker's construction differs only in the way it describes what it means to "control" a device. To Stryker, "can only control" means "can issue control commands only to [certain devices]."[6] KSEA, by contrast, draws from the specification and proposes the term means "is not programmed to directly control devices which have functions for which a breakdown or failure thereof during a medical procedure may be critical or life-threatening for the patient including, e.g., functions of endoscopic devices, operating table controls, insufflators, pumps, or RF-surgery devices."

The term "can only control devices that do not have safety-related functions" shall be construed as "can issue control commands only to devices whose breakdown or failure is not life-threatening to a patient and cannot issue control commands to devices whose breakdown or failure

[6] Stryker's full proposal is "can issue control commands only to devices whose breakdown or failure is not life-threatening to a patient and cannot issue control commands to devices whose breakdown or failure may be life-threatening to a patient."

may be life-threatening to a patient." KSEA insists nothing in the intrinsic record restricts the concept of "control" to issuing a "control command," but Stryker's construction of "control" finds direct support in the claim language. *See, e.g.*, *id.* at 7:21–24. For instance, claim 1 recites "a touch panel that communicates a *control command* associated with said at least one medical device having safety-related functions and a *control command* associated with said at least one device having non-safety-related functions." Dkt. No. 176, Ex. 4 at 7:16–20 (emphasis added).

Next, Stryker's construction of "safety-related" finds direct exposition in the specification. *Id.* at 1:54–62. KSEA's construction, by contrast, is far less enticing on this front. KSEA argues the construction must include "safety-critical functions" given the specification states "the first computer unit serves at least for the control of medical devices, which carry out safety-related *and safety critical functions, respectively*." Dkt. No. 176, Ex. 4 at 5:22–24 (emphasis added). Because "safety-critical" never appears in the claims, however, and use of the word "respectively" suggests "safety-critical" is different from "safety-related," there is an insufficient foundation to import the term "safety-critical" into the construction.

Lastly, KSEA believes the specification indicates the difference between the two controllers is driven in part by the software or programming therein. Specifically, as to the second controller, the specification provides "no tasks are allowed to run" that "serve to control safety-related devices." *Id.* at 6:16–19. KSEA submits one skilled in the art would understand the second controller therefore "is not programmed to directly control" safety-related devices. KSEA's additional details, however, would add unwarranted complexity and confusion, and rely merely on disclosed embodiments and expert testimony. This foundation, though relevant, is insufficient to import this limitation into the term in this instance.

9. "wherein said second controller communicates the control command associated with said at least one medical device having safety related functions received from said touch panel to said first controller"

The final term appears in claim 1 and refers to what the second controller does when it receives a command for a safety-related device, even though it controls only non-safety-related

devices. In essence, the second controller sends the command to the first controller, so the first controller can carry it out. That concept is captured by providing the second controller "communicates the control command" to the first controller. The parties disagree as to the particular meaning of the word "communicates."

The disputed phrase, however, will not be further construed. Taken in context, alongside the other claim components, the phrase is not unclear and would be well understood by a person of ordinary skill in the art. Indicative of that point, Stryker's construction merely changes "communicates" to "simply passes . . . on," and replaces "control command" with "instruction to perform a particular action." KSEA's proposal merely changes "command" to "instruction" and "panel" to "screen." This substitution of synonyms does not provide additional clarity.

Stryker disagrees, and responds the word "communicates" is inherently ambiguous. To Stryker, it is unclear why the second controller is said to be controlling non-safety-related devices when it "communicates" control commands to devices that it controls, yet it is not controlling safety-related devices when it "communicates" control commands to the first controller. Stryker submits its construction eliminates the ambiguity: when the second controller receives a control command for a safety-related device, it "simply passes the [control command] on to the first controller" to execute. Dkt. No. 201 at 24:25–26. Stryker also notes the applicants stressed during prosecution "[t]he second controller is simply a pass-through for information," Dkt. No. 176, Ex. 20.4 at KS045664, and insists the specification describes the first controller as a "closed system," suggesting the second controller must pass on its instructions. Dkt. No. 176, Ex. 4 at 2:4–12, 2:23–25. As KSEA notes, however, Stryker's construction appears unduly limiting in light of the specification, *see id.* at 5:11–15 (describing communication as "exchanging data"), and in any event is not supported unambiguously by the cited prosecution history, *see id.* Ex. 20.4 at 045664 (suggesting communication could involve translation). *See also id.* Ex. 19 at 102:7–115:8 (suggesting "communicates" is a broad term that encompasses in some instances more than "passing on" information). There is no inherent ambiguity when reading the phrase in the context of the other claims. The appropriate course of action is to leave this particular claim untouched.

V. CONCLUSION

The disputed claim terms of the patents-in-suit are construed as set forth above. A further Case Management Conference shall be held on August 11, 2016, at 10:00 a.m. in Courtroom 3, 17th Floor, United States Courthouse, 450 Golden Gate Avenue, San Francisco, California. The parties shall file a Joint Case Management Statement at least one week prior to the Conference.

IT IS SO ORDERED.

Dated: July 5, 2016

RICHARD SEEBORG
United States District Judge